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| 26161 | 7590 | 03/29/2006 | EXAMINER | |
| FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022 | | | ALEJANDRO, RAYMOND | |
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| | | | 1745 | |

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/629,929

Applicant(s)

MOLLOY ET AL.

Examiner

Raymond Alejandro

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07/29/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. This application is a continuation of Application No. 09/400020, filed 09/21/99.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 07/29/03 was considered by the examiner.

Drawings

3. The drawings were received on 07/29/03. These drawings are acceptable.

Specification

4. The preliminary amendment filed 07/29/03 does not introduce new matter into the disclosure of the invention.
5. The disclosure is objected to because of the following informalities: the current status of the parent application (i.e. whether abandoned or patented and its patent) should be updated.

Appropriate correction is required.

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

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The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Double Patenting

7. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

8. Claims 33 and 39 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 and 7, or 9 and 15, or 17 and 23 of prior U.S. Patent No. 6641947. This is a double patenting rejection.

The US Patent '947 claims the following:

The combination of claims 1 and 7 provides exactly the same invention as that of claims 33 and 39:

1. A method for controlling air flow in a metal air battery 20
comprising:
(a) confining at least one metal air cell within a cartridge,
said cartridge having an air inlet opening and an air
outlet opening; and
(b) moving air through any of a plurality of air flow paths 25
within said cartridge,
wherein each of said paths passes through the same air
inlet opening of said cartridge, through a diffusion
tube, through a distributor tube, across an active
surface of at least one of metal air cell, and through 30
the same air outlet opening of said cartridge, and
wherein all of said paths are substantially equal in
length.

7. The method of claim 1, wherein step (b) includes moving air through the diffusion tube, changing the direction of air flow 180°, then moving air through the distributor tube.

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The combination of claims 9 and 15 provides exactly the same invention as that of claims

33 and 39:

9. A method for controlling air flow in a metal air battery,
the method comprising:

(a) confining at least one metal air cell within a cartridge, 55
the cartridge having an air inlet opening and an air
outlet opening; and

(b) moving air through any of a plurality of air flow paths
within the cartridge,
wherein each of the paths passes through the air inlet 60
opening of the cartridge, then through a diffusion
tube, then through a distributor tube, then across an
active surface of at least one metal air cell, the active
surface being distinct from the distributor tube, and
then through the air outlet opening of the cartridge, 65
and wherein all of the paths are substantially equal in
length.

15 15. The method of claim 9, wherein step (b) includes
moving air through the diffusion tube, changing the direction
of air flow 180°, then moving air through the distributor
tube.

The combination of claims 17 and 23 provides exactly the same invention as that of

claims 33 and 39:

17. A method for controlling air flow in a metal air battery,
the method comprising:

25 (a) confining at least one metal air cell within a cartridge,
the cartridge having an air inlet opening and an air
outlet opening; and

(b) moving air through any of a plurality of air flow paths
within the cartridge,
wherein each of said paths passes through said air inlet
opening of said cartridge, through a diffusion tube,
30 through a distributor tube, and across an active
surface of at least one of metal air cell, and
wherein all of said paths pass through one air outlet
opening of said cartridge and are substantially equal
35 in length.

23. The method of claim 17, wherein step (b) includes
moving air through the diffusion tube, changing the direction
of air flow 180°, then moving air through the distributor
50 tube.

In this case, the examiner notes that since the present claims and the claims of the U.S.

Patent No. 6641947 recite only a single air inlet opening, a single air outlet opening; and a

single diffusion tube and a single distributor tube, then each of the paths necessarily pass

through the same air inlet opening, the same air outlet opening, the same diffusion tube and the

same distributor tube.

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9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 33-54 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-42 of U.S. Patent No. 6641947. Although the conflicting claims are not identical, they are not patentably distinct from each other because::

The US Patent '947 claims the following (CLAIMS 1-42):

the cartridge in the housing. The cartridge release latch also serves the purpose of allowing air to exit the housing.

When the cells in the cartridge are depleted, the entire cartridge can be easily removed, then replaced with a fresh cartridge. The cartridge and the housing are configured to interlock only when the cartridge is placed in the housing in the proper position. That is, the cartridge and housing interlock only when the air inlet opening in the cartridge and the air outlet opening of the housing align. In addition, the electrical contacts align in this position. This configuration prevents a consumer from placing the cartridge in the housing upside-down, or rotated by 180°.

All publications and patents mentioned in this application are herein incorporated by reference to the same extent as if each individual publication or patent was specifically and individually indicated to be incorporated by reference.

Other embodiments are within the scope of the following claims.

What is claimed is:

1. A method for controlling air flow in a metal air battery comprising:

- (a) confining at least one metal air cell within a cartridge, said cartridge having an air inlet opening and an air outlet opening; and
- (b) moving air through any of a plurality of air flow paths within said cartridge, wherein each of said paths passes through the same air inlet opening of said cartridge, through a diffusion tube, through a distributor tube, across an active surface of at least one of metal air cell, and through the same air outlet opening of said cartridge, and wherein all of said paths are substantially equal in length.

10. The method of claim 9, wherein, after passing across the active surface of at least one metal air cell, each of the paths passes through a second distributor tube, and then through a second diffusion tube.

11. The method of claim 9, wherein each of said air flow paths passes through an opening in a panel.

12. The method of claim 9, wherein air is moved through said cartridge by an air mover exterior to said cartridge.

13. The method of claim 12, wherein said air mover pushes air into said cartridge.

14. The method of claim 13, wherein said air mover extracts air from said cartridge.

15. The method of claim 9, wherein step (b) includes moving air through the diffusion tube, changing the direction of air flow 180°, then moving air through the distributor tube.

16. The method of claim 9, wherein step (b) includes moving air through the diffusion tube, changing the direction of air flow 180°, moving air through the distributor tube, changing the direction of air flow 90°, then moving air across an active surface of at least one metal-air cell.

17. A method for controlling air flow in a metal air battery, the method comprising:

- (a) confining at least one metal air cell within a cartridge, the cartridge having an air inlet opening and an air outlet opening; and
- (b) moving air through any of a plurality of air flow paths within the cartridge, wherein each of said paths passes through said air inlet opening of said cartridge, through a diffusion tube, through a distributor tube, and across an active surface of at least one of metal air cell, and

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2. The method of claim 1, wherein each of said air flow paths passes through two diffusion tubes and two distributor tubes.

3. The method of claim 1, wherein each of said air flow paths passes through an opening in a panel.

4. The method of claim 1, wherein air is moved through said cartridge by an air mover exterior to said cartridge.

5. The method of claim 4, wherein said air mover pushes air into said cartridge.

6. The method of claim 5, wherein said air mover extracts air from said cartridge.

7. The method of claim 1, wherein step (b) includes moving air through the diffusion tube, changing the direction of air flow 180°, then moving air through the distributor tube.

8. The method of claim 1, wherein step (b) includes moving air through the diffusion tube, changing the direction of air flow 180°, moving air through the distributor tube, changing the direction of air flow 90°, then moving air across an active surface of at least one metal-air cell.

9. A method for controlling air flow in a metal air battery, the method comprising:

(a) confining at least one metal air cell within a cartridge, the cartridge having an air inlet opening and an air outlet opening; and

(b) moving air through any of a plurality of air flow paths within the cartridge, wherein each of the paths passes through the air inlet opening of the cartridge, then through a diffusion tube, then through a distributor tube, then across an active surface of at least one metal air cell, the active surface being distinct from the distributor tube, and then through the air outlet opening of the cartridge, and wherein all of the paths are substantially equal in length.

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tube, and through said air outlet opening of said cartridge, and wherein all of said paths are substantially equal in length.

26. The method of claim 25, wherein each of said air flow paths passes through an opening in a panel.

27. The method of claim 25, wherein air is moved through said cartridge by an air mover exterior to said cartridge.

28. The method of claim 27, wherein said air mover pushes air into said cartridge.

29. The method of claim 28, wherein said air mover extracts air from said cartridge.

30. The method of claim 25, wherein step (b) includes moving air through the first diffusion tube, changing the direction of air flow 180°, then moving air through the first distributor tube.

31. The method of claim 25, wherein step (b) includes moving air through the first diffusion tube, changing the direction of air flow 180°, moving air through the first distributor tube, changing the direction of air flow 90°, then moving air across an active surface of at least one metal-air cell.

32. A method for controlling air flow in a metal air battery, the method comprising:

(a) confining at least one metal air cell within a cartridge, said cartridge having an air inlet opening and an air outlet opening; and

(b) moving air through any of a plurality of air flow paths within said cartridge, wherein each of said paths passes through the same air inlet opening of said cartridge, across an active surface of at least one of metal air cell, and through the same air outlet opening of said cartridge, and wherein all of said paths are substantially equal in length.

wherein all of said paths pass through one air outlet opening of said cartridge and are substantially equal in length.

18. The method of claim 17, wherein each of said air flow paths passes through two diffusion tubes and two distributor tubes.

19. The method of claim 17, wherein each of said air flow paths passes through an opening in a panel.

20. The method of claim 17, wherein air is moved through said cartridge by an air mover exterior to said cartridge.

21. The method of claim 20, wherein said air mover pushes air into said cartridge.

22. The method of claim 21, wherein said air mover extracts air from said cartridge.

23. The method of claim 17, wherein step (b) includes moving air through the diffusion tube, changing the direction of air flow 180°, then moving air through the distributor tube.

24. The method of claim 17, wherein step (b) includes moving air through the diffusion tube, changing the direction of air flow 180°, moving air through the distributor tube, changing the direction of air flow 90°, then moving air across an active surface of at least one metal-air cell.

25. A method for controlling air flow in a metal air battery, the method comprising:

(a) confining at least one metal air cell within a cartridge, said cartridge having an air inlet opening and an air outlet opening; and

(b) moving air through any of a plurality of air flow paths within said cartridge, wherein each of said paths passes through said air inlet opening of said cartridge, through a first diffusion tube, through a first distributor tube, across an active surface of at least one of metal air cell, through a second distributor tube, through a second diffusion

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33. The method of claim 32, wherein each of said air flow paths passes through two diffusion tubes and two distributor tubes.

34. The method of claim 32, wherein each of said air flow paths passes through an opening in a panel.

35. The method of claim 32, wherein air is moved through said cartridge by an air mover exterior to said cartridge.

36. The method of claim 35, wherein said air mover pushes air into said cartridge.

37. The method of claim 36, wherein said air mover extracts air from said cartridge.

38. The method of claim 32, wherein step (b) includes moving air through a diffusion tube, changing the direction of air flow 180°, then moving air through a distributor tube.

39. The method of claim 32, wherein step (b) includes moving air through the diffusion tube, changing the direction of air flow 180°, moving air through the distributor tube, changing the direction of air flow 90°, then moving air across an active surface of at least one metal-air cell.

40. The method of claim 25, wherein step (b) includes moving air through the second distributor tube, changing the direction of air flow 180°, then moving air through the second diffusion tube.

41. The method of claim 25, wherein step (b) includes moving air across the active surface of the at least one of metal air cell, changing the direction of air flow 90°, moving air through the second distributor tube, changing the direction of air flow 180°, then moving air through the second diffusion tube.

42. The method of claim 32, wherein step (b) includes moving air through a distributor tube, changing the direction on air flow 180°, then moving air through a diffusion tube.

* * * * *

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In this case, the examiner notes that the claims of the U.S. Patent No. 6641947 fully encompasses or anticipates the subject matter of the present claims.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 33-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Cheiky 5571630.

The present claims are geared toward a method for controlling air flow in a metal air cell wherein the disclosed inventive concept comprises the specific air flow distribution.

As to claims 33, 41, 46 and 50:

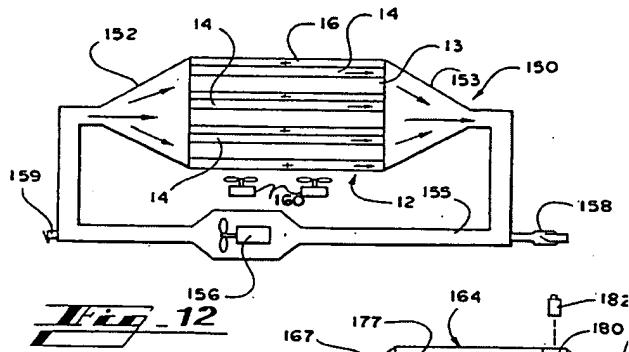
Cheiky discloses an air manager system for metal-air battery (TITLE). Cheiky discloses controlling the humidity of and removing heat from the air passed over an air cathode (COL 4, lines 60-64). *Thus, Cheiky readily envisions and inherently claims the method for controlling air flow.*

Cheiky discloses a power supply 10 including an air manager system including metal air cells (COL 5, lines 39-45). The cells are enclosed by a housing including a pair of side panels 22 and a top panel 23 (COL 5, lines 65-68). *This forms the cartridge.*

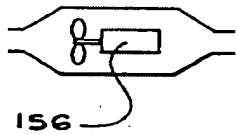
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Cheiky also teaches air inlets (COL 5, lines 65-67/COL 6, lines 23-26) and air outlets (COL 6, lines 28-32).

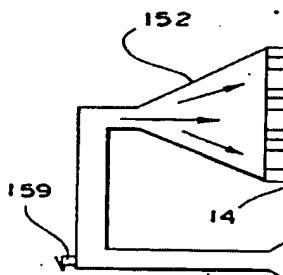
Figure 12 below illustrates an air manager system 150 including air inlet openings and air outlet openings; a inlet diffusion tube and a inlet distributor tube; and an outlet diffusion tube and an outlet distributor tube. Reference numeral 158 represents an air inlet and reference numeral 159 may represent the air outlet:



In particular as seen below, the examiner is of the view that the sections adjacent to the fan 156 serve as the air inlet opening and the air outlet opening:



Moreover, as further observed below, a diffusion tube is present right next to the air inlet opening and a distributor tube reversing the direction of air flow is also present (*represented by the arrows section*).



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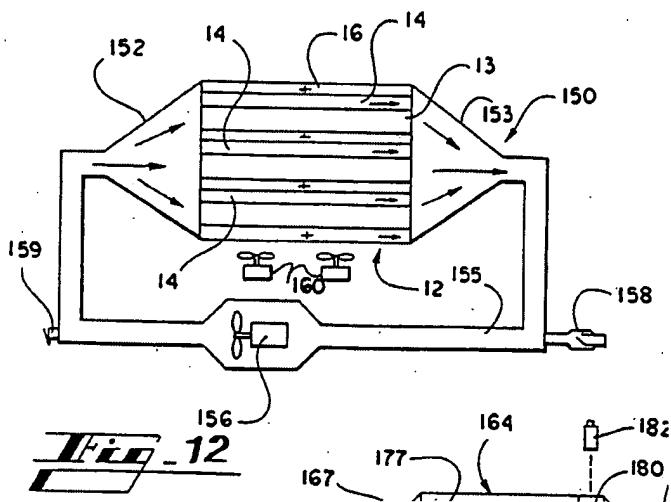
Additionally, the air flow paths represented by the upper arrow and the lower arrow are substantially equal in length. Thus, at least a plurality of air flow paths are equal in length.



As to claims 34, 43, 45, 51-52:

As can be viewed from observing Figure 12, the air flow paths passes through inlet diffusion tube and inlet distribution tube; and outlet diffusion tube and outlet distribution tube.

Figure 12 also illustrates respective air flow directions in said distinct tubes.



As to claim 35:

The cells are enclosed by a housing including a pair of side panels 22 and a top panel 23 (COL 5, lines 65-68).

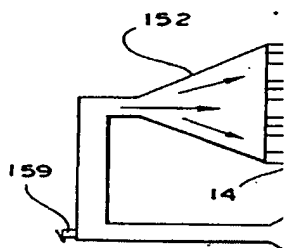
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As to claims 36-38, 42, 48:

Reference numeral 156 is a fan (the air mover) exterior to the cartridge containing the metal air cells; wherein the fan pushes air into the cartridge at the inlet and extracts air from the cartridge at the outlet.

As to claim 39:

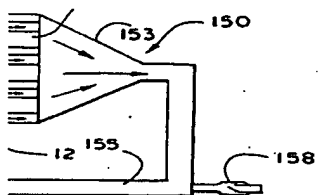
Moreover, as further observed below, a diffusion tube is present right next to the air inlet opening and a distributor tube reversing (*changing the direction 180°*) the direction of air flow is also present (*represented by the arrows section*).

As to claim 40:

Given that the embodiment of **Figure 12** encompasses re-circulating air, it is noted that during recirculation the direction of the air flow turns about 90° at middle tubes connecting what is considered the inlet/outlet diffusion tubes and the inlet/outlet distributor tubes (See Figure 12).

As to claims 44, 49, 53:

In this instance, since claim 44 does not require a diffusion tube and a distributor tube, the change in direction of 90° is right after the arrow sections:



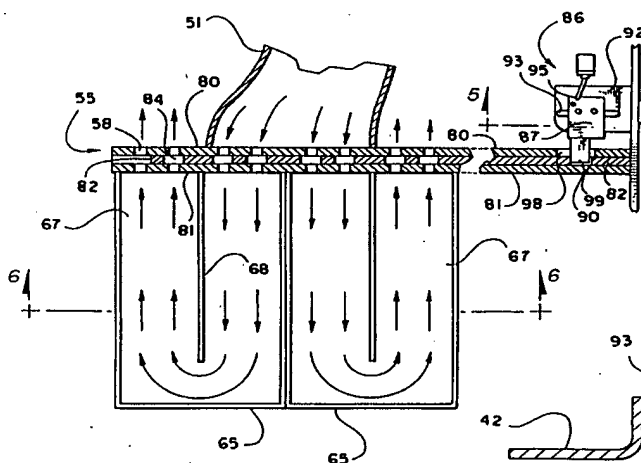
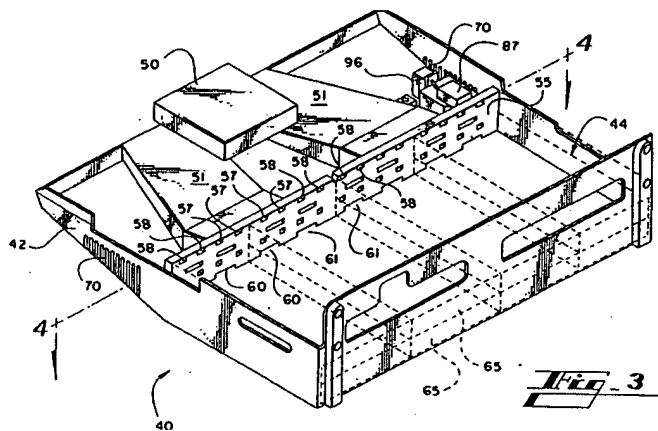
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As to claims 47 and 54:

Reference numeral 158 represents an air inlet and reference numeral 159 may represent the air outlet.

Concerning at least claims 41, 46, 50 and 53:

The embodiment represented by Figures 3-4 clearly anticipate the subject matter of the above-mentioned claims:



Thus, the current claims are anticipated.

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13. Claims 41-54 are rejected under 35 U.S.C. 102(e) as being anticipated by Witzigreuter 6068944.

As to claims 41, 46, 50 and 53:

Witzigreuter discloses air distributors for metal-air cells (TITLE) including a ventilation system for one or more metal air cells including a distributor for distributing oxygen (ABSTRACT). Disclosed is the metal-air battery 20 including a battery housing 24 through which a reactant air flow is defined; wherein air is moved along the reactant air flow path by an air moving device such as a fan 70 to supply air to metal-air cells (COL 5, lines 10-17). Included is an inlet ventilation passageway 30 which includes an inlet opening defined through the battery housing 24 and an outlet opening 36 defined through the battery housing 24 (COL 5, lines 17-22). Figures 2 and 9 illustrate the metal-air battery:

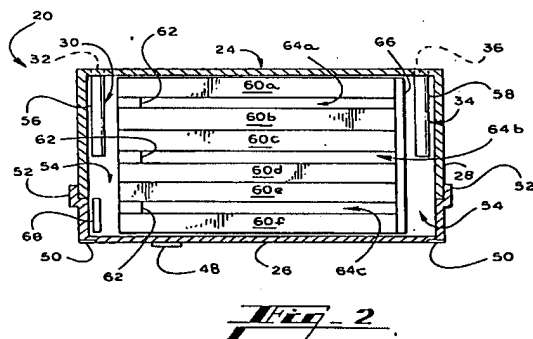


Fig. 2

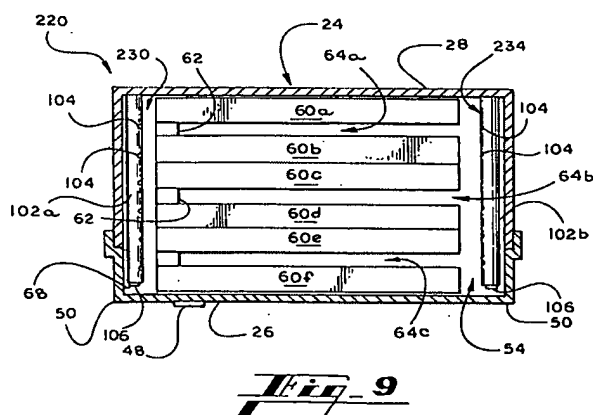


Fig. 9

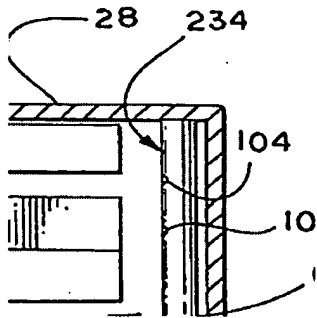
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As to claim 42 and 48:

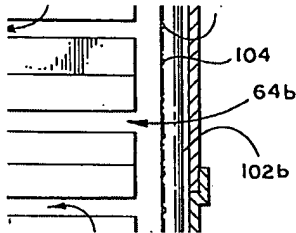
Witzigreuter employs an air moving device such as a fan 70 to supply air to metal-air cells (COL 5, lines 10-17).

As to claims 43, 46-47, 51-52:

At the upper right hand side, air moves in a first direction to reach outlet aperture 104 and then, air moves in a reversed direction towards the outlet opening:

As to claims 44, 49, 51-52, 53-54:

At the middle sections, air moves in a first direction to reach outlet aperture 104 and then, air turns about 90° towards the outlet opening:

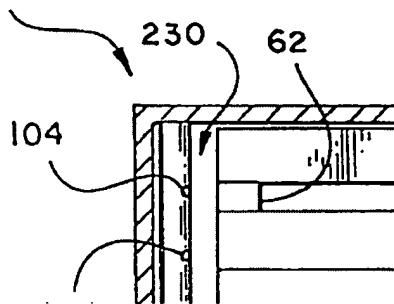
As to claim 45:

Ventilation passageways 230 and 234 represent the tube in which air moves through (COL 14, lines 32-35).

As to claim 50:

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At the upper left hand side, air moves in a first direction to reach inlet aperture 104 and then, air moves in a reversed direction towards the upper air metal cells:



Thus, the present claims are anticipated.

Conclusion

14. This is a continuation of applicant's earlier Application No. 09/400020. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however,

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event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Alejandro whose telephone number is (571) 272-1282.

The examiner can normally be reached on Monday-Thursday (8:00 am - 6:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Raymond Alejandro
Primary Examiner
Art Unit 1745



RAYMOND ALEJANDRO
PRIMARY EXAMINER